



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

11/05/2004

EXAMINER

Patent Counsel Applied Materials, Inc. P.O. Box 450 A Santa Clara, CA 95052 GHYKA, ALEXANDER G

ART UNIT PAPER NUMBER

2812

DATE MAILED: 11/05/2004

	APPLICATION NO. FILING DATE 10/796.602 03/08/2004		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
			Tony Chiang	AM-2044.C2	1793

TITLE OF INVENTION: METHOD OF PREVENTING DIFFUSION OF COPPER THROUGH A TANTALUM-COMPRISING BARRIER LAYER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1370	\$300	\$1670	02/07/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (703) 746-4000

appropriate. All further co indicated unless corrected maintenance fee notificatio	rrespondence including the I below or directed otherwise	Patent, advance or in Block 1, by (a)	ders and notifice) specifying a r	cation of maintenance fees when correspondence address	will be mailed to the current; and/or (b) indicating a separate	correspondence address as a rate "FEE ADDRESS" for
CURRENT CORRESPONDEN	CE ADDRESS (Note: Use Block 1 for	any change of address)		papers. Each addition	al paper, such as an assignme	or domestic mailings of the for any other accompanying ent or formal drawing, must
Patent Counsel Applied Materials, P.O. Box 450 A				Co	rtificate of Mailing or Trans	smission g deposited with the United st class mail in an envelope above, or being facsimile
Santa Clara, CA 9	5052			transmitted to the USI	710 (703) 746-4000, on the c	
		addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below. (Cospositor's name) (Cospositor's				
						(Date)
APPLICATION NO.	FILING DATE	1	FIRST NAMED I	NVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,602	03/08/2004		Tony Ch	iang	AM-2044.C2	1793
TITLE OF INVENTION: N	METHOD OF PREVENTING					
APPLN. TYPE	SMALL ENTITY	ISSUE FI	EE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1370		\$300	\$1670	02/07/2005
EXA	MINER	ART UN	IT	CLASS-SUBCLASS]	
GHYKA, AL	LEXANDER G	2812		438-687000		
"Fee Address" indica PTO/SB/47; Rev 03-02 Number is required. 3. ASSIGNEE NAME ANI	ation (or "Fee Address" Indica or more recent) attached. Use D RESIDENCE DATA TO B as an assignee is identified be in 37 CFR 3.11. Completion	e of a Customer E PRINTED ON To clow, no assignee of this form is NOT	or agents OF (2) the name registered at 2 registered listed, no nate of the particular of the particu	R, alternatively, e of a single firm (having as torney or agent) and the nar patent attorneys or agents. It me will be printed. (print or type) or on the patent. If an assig or filing an assignment.	a member a 2	locument has been filed for
Please check the appropriat 4a. The following fee(s) are Issue Fee Publication Fee (No	te assignee category or catego e enclosed: small entity discount permitte	ries (will not be pr 4b	inted on the pate. Payment of Form A check in Payment by	ent): Individual Cee(s): the amount of the fee(s) is e y credit card. Form PTO-203 tor is hereby authorized by	Corporation or other private grandlessed. 8 is attached. Charge the required fee(s), or	credit any overpayment, to
			Deposit Accou	int Number	(enclose an extra	copy of this form).
_ ~ .	•	•	h Applicar	nt is no longer claiming SMA	ALL ENTITY status See 37 C	FR 1.27(g)(2)
Authorized Signature				Date		
Typed or printed name			Registration No.			
This collection of informati an application. Confidentia submitting the completed a	ion is required by 37 CFR 1.3 lity is governed by 35 U.S.C. application form to the USPT	11. The informatio 122 and 37 CFR O. Time will vary	on is required to 1.14. This colle depending upo	obtain or retain a benefit by ection is estimated to take 12 on the individual case. Any c	the public which is to file (ar minutes to complete, includi comments on the amount of t	d by the USPTO to process) ng gathering, preparing, and me you require to complete

this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/796,602	03/08/2004	Tony Chiang	AM-2044.C2	1793		
7590 11/05/2004			EXAM	EXAMINER		
Patent Counsel			GHYKA, ALEXANDER G			
Applied Materials, I P.O. Box 450 A	Inc.		ART UNIT	- PAPER NUMBER		
Santa Clara, CA 950	052		2812			
			DATE MAILED: 11/05/200	4		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.